

CLAIMS

1. A process for the production of alcoholic beverages, to which a mixture of enzymes is added, which mixture comprises at least an endo- β (1,4)-xylanase, an arabinofuranosidase, an alpha-amylase, an endo-protease and a β (1,3;1,4)-glucanase.

2. A process according to claim 1, where the mixture also comprises a saccharifying amylase.

3. A process according to claim 1 or 2, where the mixture also comprises an exo-peptidase.

4. A process according to any of claim 1-3, characterized in that that alcoholic beverage is beer.

5. A process according to any one of the claims 1-4, characterized in that each of said enzymes is provided by the seeds of an individual transgenic plant line.

6. A process according to any of claims 1-4, characterized in that that more than one enzyme is provided by the seeds of an individual transgenic plant line.

7. A process according to any of claims 1-6, characterized in that at least one enzyme is provided by the seeds of an individual plant line.

8. A process according to any of claims 5-7, characterized in that the transgenic plant line is a barley plant line.

9. Transgenic seeds for use in the production of alcoholic beverages, expressing the enzymes which are necessary in the process for production of said beverages.

10. Transgenic seeds according to claim 9, expressing enzymes selected from the group of alpha-amylase, endo- β -1,4-xylanase, β -1,3-1,4-glucanase, endoprotease, arabinofuranosidase, saccharifying amylase and exopeptidase.

1. A process for the production of alcoholic beverages, to which a mixture of enzymes is added, which mixture comprises at least an endo-3(1,4)-xylanase, an arabinofuranosidase, an alpha-amylase, an endo-protease and a 3-(1,3;1,4)-glucanase.
2. A process according to claim 1, where the mixture also comprises a saccharifying amylase.
3. A process according to claim 1 or 2, where the mixture also comprises an exo-peptidase.
4. A process according to any of claim 1-3, characterized in that that alcoholic beverage is beer.
5. A process according to any one of the claims 1-4, characterized in that each of said enzymes is provided by the seeds of an individual transgenic plant line.
6. A process according to any of claims 1-4, characterized in that that more than one enzyme is provided by the seeds of an individual transgenic plant line.
7. A process according to any of claims 1-6, characterized in that at least one enzyme is provided by the seeds of an individual plant line.
8. A process according to any of claims 5-7, characterized in that the transgenic plant line is a barley plant line.

AMENDED SHEET